

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/864,680

DATE: 07/24/2001

TIME: 11:38:05

Input Set : N:\Crf3\RULE60\09864680.txt

Output Set: N:\CRF3\07242001\I864680.raw

#2

C--> 3 <110> APPLICANT: Staskawicz, et al.
 5 <120> TITLE OF INVENTION: Bs2 Resistance Gene
 7 <130> FILE REFERENCE: 50687
 9 <140> CURRENT APPLICATION NUMBER: 09/864,680
 10 <141> CURRENT FILING DATE: 2001-05-24
 12 <150> PRIOR APPLICATION NUMBER: 09/360,186
 13 <151> PRIOR FILING DATE: 1999-07-23
 15 <160> NUMBER OF SEQ ID NOS: 9
 17 <170> SOFTWARE: PatentIn Ver. 2.0
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 31491
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Capsicum annuum
 24 <400> SEQUENCE: 1

```

25 atgtaaattgt attaccttct ttgcagctca tttcttgaat tagaaaattg ttgttagttg 60
27 agatgtaata taagcttttt agctctccag aaaatatagt tccaacattt cgaatcggtta 120
29 gaagttcgaa agatgatata gtacacaata ataaaaataa tagtgccgac actgattctg 180
31 aaattaatcc cgaaattagt tatgtaaaag aacgaagaag aaaacaaatg gcagtcacga 240
33 tgcgagtggt atgataaaaa tcattctgga agaaaattgt tatctatgag gaagttgctt 300
35 gattacatga actccaaaag tgcagccttt ttgcagaaat aaaggaccat ttgtgttcag 360
37 cattatataa taaggaccta agtgaatcta ctattttaaag ttaagggact atttatgctg 420
39 ataaattctg cagatatcat ttcaaaactc tttatctttt gttcttatac acataatatt 480
41 gtcattttct ctatcatttt ctcaaatatt tcttgaggag aatttgaagt tgtattatct 540
43 gcaattgaat ggtagttttc ccttaattac tctctcattt aattaaagta taatttgata 600
45 tagagcaaaa caacacttgt agtagtttat cgaagtctaa tttagctctt tgtactaata 660
47 gctaaaacta ttcaaaaatg ccgctgggtg caagttggat tcttcaaagt tgtgcatttt 720
49 ttgaggatcc gactcgggtg taacaacttt ttaaagaacc ccagcaacat cctaagaaaa 780
51 tattacctaa ctaagcagag gcggagccag gatttttagt tatgggctaa aatttcaatt 840
53 aaggggttca atatccgaag gaaaaactag ccaaaggggg ttcaacacac tactatatat 900
55 atatatatac ataaaaatga ttttaattat gtataaatag tatatttttc catcgaaggg 960
57 gactcggatg aaacccttag ccaaaggctg ggttctgaac catgacatta ttttcatact 1020
59 gagcggttaa ttattttttac acattaaatg agctaaagct actgagtttt gccgaatctg 1080
61 tagctttaag gctggctctg cccctgtaag aaaggaccag ctgacaatga ttattgcctt 1140
63 acatgcttat ttgttgatcc tccctgatgc ctctcgatca aaagttgatg ggatttcact 1200
65 ggaacaaaga aatggacctt aggtctaact caagaggtga ggattgatga agatcataca 1260
67 aagaggccaa atgctcttta accctccgat ttcagactca actcactgtt accctgtgat 1320
69 atctatgact aagacaaata cattacctga tcttatttag tttatgcgtg ccatttttagc 1380
71 aaatctgcgt atctcattat ttgtaatacc attgacctcg tgcaacctg cagggtttcag 1440
73 gtcatagtcg caaaggacaa aaacgagaat acagtatata tggctcatgc aagtgtggct 1500
75 tctcttatga gaacaataga atctctcttg acattcaatt cgcgatgca atctctatcc 1560
77 tgtgatcaca gagaagaact ttgcgctctt cgtgaaaaag ttagttccct ggaagtattt 1620
79 gtcaagaact ttgagaaaaa caatgttttt ggggaaatga cggattttga agtagaggta 1680
81 agagaagttg caagtgtctg tgaatacaca attcaactga gactaacagg aactgtactg 1740
83 ggagaaaaata aaagccagaa aaaaaaggcg cgtcgaaggt ttcgtcaaag cctgcaacaa 1800
85 gtagcagagg acatggatca tatctggaaa gagtcgacaa agatccaaga taaaggaaaa 1860
87 caagtatcaa aggaatcatt ggttcattat ttttcaagtt caacaaacga tattttgaag 1920
89 gttaagaaca atatggttg agctgatgat caaaggaaac agttgttaga agatctgact 1980

```

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/864,680

DATE: 07/24/2001

TIME: 11:38:05

Input Set : N:\Crif3\RULE60\09864680.txt

Output Set: N:\CRF3\07242001\I864680.raw

```

91 agaagctact ctggggaacc caaagtcac ccgattgtcg ggatgggagg cataggtaaa 2040
93 acaaccttag caaaagaagt ttacaatgat gaatcaattc tatgccgttt tgatgttcat 2100
95 gcctgggcta ccatatctca acagcacaa aaaaaggaaa ttttgctggg ctttctgcat 2160
97 tccacaatca aaatggatga cagggttaag atgattgggt aagcagagct agcagacatg 2220
99 ttacagaaaa gtttaaagag aaagaggtag ttaattgtct tggatgatat ctggagttgt 2280
101 gaagtgtggg atggcgtgag acgatgcttt ccaactgaag acaatgcagg gagtcgaata 2340
103 ctgttgacta cccgtaatga tgaagtagct tgttatgctg gtgtagagaa tttttctttg 2400
105 cggatgagct tcatggatca agatgagagt tggagctttt tcaaaagtgc agcattttca 2460
107 agtgaagcat taccatatga gttcgagact gttggaaagc aaatgcaga tgaatgtcac 2520
109 gggttaccac taactattgt cgtggttgca gggcttctca aatctaaaag gacaatagaa 2580
111 gattggaaaa ctgttgctaa agatgtcaag tcattcgtca caaatgatcc tgatgaacga 2640
113 tgttcacgtg tgcttgggtt gagttacgat cacttgacaa gcgatctaaa aacatgtctt 2700
115 ctgcatttcg gaatttttcc agaagacagt gatattccag tgaagaattt gatgagatca 2760
117 tggatggctg aggggttcct gaagttggaa aatgatttgg aaggagaggt tgagaagtgt 2820
119 ttgcaagagc ttgtcgatag atgtctagtc ctgcgcagca agagaagtcg agatggaaca 2880
121 aaaattagat catgtaaggt tcatgatcta atatatgacc tgtgcgtgag agaagttcaa 2940
123 agggagaaca tttttatcat gaacgacatt gttcttgacg tatcatatcc agaattttca 3000
125 tatctctgta tgtataaaat gcagcccttt aagcgcgtga ctggtgatga aattaattat 3060
127 tgtccctatg gtctttatag ggctcttctt acccctgtaa atcgtcagtt gagagatcat 3120
129 gacaacaaca atcttttgaa acgaacccat tctgttttct cttttcatct tgagccttta 3180
131 tattatgttc tcaaatcaga ggttgttcat ttcaaattac tcaaagtctt ggagctgaga 3240
133 cacagacaga ttgatgggtt ccctcgagag atactaagcc tcatctggtt gaggtacctt 3300
135 tcattgttca gctatgggaa tttcgatgta cctccagaaa tttgcagggt atggaatctg 3360
137 cagacattca ttgttcaacg gtttcgatca gatataataa tttttgctga ggaaatttgg 3420
139 gaactaatgc aattaaggca tcttaaactg cccagatttt atttgccaga ttgcccaggt 3480
141 ggatctgttg acaaaggaa gcaacttgat ttttcaaact tacaactat ttcttacttg 3540
143 tctccacgtt gttgcacgaa ggaggttatt atggggattc agaattgtca aaaattagga 3600
145 atcagtggaa ataaggatga ctataaaagt tttcgggact ctgggcttcc caacaattct 3660
147 gtctatctgc agcaacttga aatattgagt cttatatctg ttgattatag ctttttgcca 3720
149 gtgatcattt caagtgcaaa agcttttcca gcaacgctca agaagttgaa gttggaaaga 3780
151 acttatctaa gctggtcata cttggacatc atagctgagt tgccctaacct tgagggtgctg 3840
153 aagctgatgg atgacgcttg ttgtggtgaa gaatggcatc caattgttat gggatttaat 3900
155 cgattgaagc ttttgctaat taaatatagt tttctcaagt tctggaaagc cacaatgac 3960
157 aattttcctg tcttgagcgc cctcatgatt agaagttgca aaaatttgaa agagataccc 4020
159 attgagtttg cagatataca cacactacag ctgattgagt taagagagtg tctcccaaaa 4080
161 cttggggaat ctgctgcacg aattcagaaa gaacaagaag acctcggaag caaccctgtg 4140
163 gatgttcgta tctcaaatcc atgtaagtat atatttatca aggttatact cagtttctca 4200
165 ttttcacaag tcaagtcata cacaacagtt atttagcttt gccccatatt ctttcacaaa 4260
167 aataacttcg acaaaatttg gttaaaaccc tacttaaaat gtaaaagaaa ttaacaagaa 4320
169 tgtcccttat atttgagagt agtaatttta cgaaatgtat cattgtgata catttgaaat 4380
171 cagattttatc atttccacga tttgtgccta gttttattac tctgaataat tgaatttgtt 4440
173 acttctctaaa ataaaaatct tttctgtttt aaatgtatca ctaattatca cgttataaca 4500
175 tatgtatcac aaatttataa atctgggata tgatctaatt taacaaattg ttgaaataaa 4560
177 gtgttataac gcttaaacat tccgggattt atgtaagtta cccatgtaaa aatgttgcag 4620
179 caccctgtac tttcgggcta gaatcaagac catcgcttct acgcgtatag acacgaacta 4680
181 gatgattcct tgttaatata tgtgtgatga tcaatactat agtggttagaa tacctttgaa 4740
183 tatgaattga ggtcacaata atcccctaac tctaagacaa gttgaaaaca tttctaccga 4800
185 ataagtttta gtgaatgttt aaacttgggt caatttccat tgaccataac ttcttgata 4860
187 taatgaatta gaggttctac tatatatcaa atgaaaggtc ttcaaattat ttttccaacg 4920

```

RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/864,680

TIME: 11:38:05

Input Set : N:\Crf3\RULE60\09864680.txt

Output Set: N:\CRF3\07242001\I864680.raw

```

189 atactaactt cgcaaaaatt cgatacccga gcgaaaagtt acaaccattt tcgtgaaaga 4980
191 ggcggtagct gcgcattgatt agcatgcgac gcacgctctg tcgcacacac ctagttttca 5040
193 ggttctgttt tagtggtttt aagggcaatt tggaccttta cttcacccaa ggtccgtcca 5100
195 taacataaga ttacgcccc aagaaagcat aatacactct ataatccaat tttcctctca 5160
197 aatcaaacca taacccttcc ccaaagatca agatcaagct cttaaagtcaa gaatttcaag 5220
199 aaaacaaatc aagattcagg ttttgtttct ttcgaaactaa cgtaatctaa ggtatgtggg 5280
201 gttttttctaa aactaacatg ggcattatta aatcggttga ataattttta aacatggtga 5340
203 aatcatgagt ttcaaagggg ttttggtaat ttacaatata attgtgtttt aagaactctt 5400
205 aaataatatt attgcttttg tcttttaggc tttccccga aattgatttt tgttagtata 5460
207 tatgtatgta tatgtgattg aagatttgaa atatacaatt agagcatgaa ttattgaatc 5520
209 tccccctccc catgtgtttt ctacttaaat tgcattgatt aaataatgag tcaagagcat 5580
211 tattatttat atgaatttta taataattga gatttgagga gggagggaat tattcatgat 5640
213 ttaattacta aatgtaataa ttttaaggaat tccaggaatg ttttgagaaa ttgaccatca 5700
215 cttgttgga ttgttgaaaa gatgagcata tttgcatggt tttgacttgt gttttgaaac 5760
217 atggaatttt cctatatatt ttgaatgata tgggtggtctg aattttgtat ttttgaaaga 5820
219 agagattgta atatgatttt atggcttaga gattcgactt gcaagtcaat ggtatgatga 5880
221 taccatataa atgtatgcca taacagagta agagtttcag acttgatttc tcagagaaaa 5940
223 catgttttaa gagctaaaag tgggcttaaa gaggggttag tgagctgaaa gtgggcttaa 6000
225 agaggggttag gtgagctaaa agtgggctta aagaggggta ggtggttgac cgaagaaggc 6060
227 ttgagttcaa gttactotta gcctaaaatc atgttttgcc gatacgggta tattattatt 6120
229 gtacgctggc gacgacctg tggcgtagta gagattcaga gactccgacc cttgcgacaa 6180
231 acttggggta ggggcttggc tgccaagtta acgacagatt ccatatagcc cgtggaattt 6240
233 cagagttgta gggatatacca cctagcgcag aagtaaaata aagagtatgt cacagatttc 6300
235 cgtaattgtt tagagtcttt ttaaataatgc ccatgcgttt tcttatcata tttatattta 6360
237 tgaactattt ttttaaaatg ctccccatgt tttgaataat tttttttatt attttgattg 6420
239 ctctgcttac attaaattgt attgaccccc ccttttcagg gtctgagctt atctagggtc 6480
241 cgccaatcgt aaatttccaa caaaacaatt tgcattgtag ctgttatccc gaaggcttcc 6540
243 ctaaaaaatt acatttgttt tgggttggtc actggggcct gtcctagatt cagacaagtt 6600
245 ataatatct tatgtagtaa agatttcgca gactgagaaa ggtgttgtct agatgttgat 6660
247 aaaattgttt tcgtattgtc ggaccgattt ggtaacatga ccatgtttcc gtctgtttta 6720
249 tttttataat atttttcttt gttatttgag tattgtgcat gattaccaga atgtagaagg 6780
251 ggcgggggccc cttcatgatt cgagatgctt gttatggcca ggggtctcggc tcgggttggtg 6840
253 acaaacttga tatcagagca cgggtccatg tcccagggtg tctgcgaaat cgtgtctagt 6900
255 agattcttgc ttatgggtgt gttgtgcacc acacttataa tccggaggct accgggcatt 6960
257 taggagttgt ttctcattct ttcatactcc agttcgtgct atagagtcgt ccataagaaa 7020
259 gatataccaag ttcatctctc gttctaattt catggacatg cctcactgtc gaggcaatac 7080
261 aagtcctaag agtctagctt cccactgatg tggttctctt tgattggttt atccacaaag 7140
263 ttatgagata gcatgtggac gggagaggag tccattagtg ctgcaaggta tattgatttg 7200
265 tgtgtatgcc ttcatcctga tgaaatcggt ctttccgacc tgaggatatga actgtattca 7260
267 ggctccttta aaagaaattc tcgtagggga tgtgatgctt aaggataatg atatgtgaca 7320
269 caatgttgga accgtctctc ctcccgataa gttatatatg ttaaagtgtc atgacctatt 7380
271 ggtagtgaga tggctctgga gttggtgaca tgaattcaca aggttaacag tcagagttag 7440
273 ggtgatattt gtgtaaataa agagttttag ttgtatagtc gtggattaag gagtgggttg 7500
275 ccattgtata ttgatagact aatgtgttat aatgatagac tagtgtgcag taatatttgt 7560
277 agattgtatg gtggtctgtg aagaaagatg caggatatga ttattattta ttcagaatag 7620
279 ggaaggatca tgggaatggat ggttatagtg gttgtagaaa tcatttataa gctgtgaatg 7680
281 gaaaggagta gattagttaa taagttgtaa gtagagactc attagtgttt attgaatttt 7740
283 gaagatcact gtgatgtaca attaacatgt atgacgtgag aaattagaat atattgataa 7800
285 gattataatg ggttatattg caagattaag atgactaaac aaatgatgtg acttaaccct 7860

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/864,680

DATE: 07/24/2001

TIME: 11:38:05

Input Set : N:\Crf3\RULE60\09864680.txt

Output Set: N:\CRF3\07242001\I864680.raw

```

287 ttgatggtct tctttagta gtgaatttga gtgtatcgtg ggatatggcg ggttgtgctg 7920
289 aagtagtagc taagtgaagt gaagtatttg gagttgattt cccaatttga tggactagaa 7980
291 tagtatgtgg catgcttcgt tgggtgtaca tgattgacgc tagatagtat aggcttgaac 8040
293 ttgagatgtg aagtgtggtg gtaagggtag tagcttaagg agtaatgatg catgttttgt 8100
295 ggattaatta gtaggccttg tgtgatgtgt gaaatggcct aaattaatga tttatgaaaa 8160
297 gtttaagtgg taattgtcac accacttttt ttcactccca aaaagaatta atttttaagt 8220
299 ttcgaaaggg ttttattatt aaagtgacaa aagatgaaag ttgtttcaaa aaaggattca 8280
301 ttagtttcaa aactcagagt caccacttgg cataaatcaa gtgtgccaag tcacccgtgg 8340
303 atatcctttt tcaaaacggt tttgactcta taaaaactga tccgcgaaca gagatttcgg 8400
305 ctaaggaatt ctgttgatcg aggagaaggt gttaggcacc cctcgatccc gtggttcgac 8460
307 cacggtcgtc tgggtgagta tatcggctaa tttggacagt atgaatgtat aaaccacacc 8520
309 aaacataaat aagacgattc aatcaagcaa acaaatccaa aaataatgtc cagtctaatt 8580
311 ataagtccaa aatagaaaaa gaatgcgaaa atataaatcc tattctaccc tacactaatt 8640
313 ttatactacg ctccatacca cccgatgcct cgagccttca tcacggacgt cctgcaaata 8700
315 caaaataact cggggaatta cccgacgaat aaatacaagt gatctcgtgg cattccccga 8760
317 ttaaatgaat acatttccca aatgcaagaa ctaaaaccaa accgttcaac tcgaattcca 8820
319 cattcaaaca ttcaacaaaa aaacttattc ctaaattttt gcttaccgga accaaccattc 8880
321 gcctatccat ttcaacgtac cataatttta tcacattcca acaatattca tgctcattac 8940
323 gaattaaaca aaacaataat aaaccaaagc taatctaaat tcaacttttt ttatcaattt 9000
325 ctcaatttca tcccccaaat ccatttttaa ccacattatt aaaccagttt gactatcaaa 9060
327 tcaactttca aaatccgaaa ctaacaacac ataccccaac gatgattcaa acatttaagc 9120
329 ataccaatca ttcatatcca caacaacaat taacattttg ctcgaaatat tcaaaactgc 9180
331 actacaaaat cacgatatta accaacttcg atataataaa aaagtggagt tgagagatgg 9240
333 acctttgaag aatcgatttc gttgataata aaatcaagaa aaccgggact atagaattcc 9300
335 taataggacc tcagcaatga cgaactccaa ctctgtattg aaaaatttga gatccaaaac 9360
337 tgaaactccg taaatccaat cgaacccaaa aacctacact gttcatgtac tattcacgat 9420
339 actgttcaca aactgttca cggatttgtt cacaatactg ttcatgacac tgttcacgac 9480
341 actgttcaat gatactgttt ctctctcaat ttttctctgc gcgattctct cctctcgtct 9540
343 ggtttttttt gttcttcttg tgaggaagat gatttgatga ttgttgttat tgtggagaag 9600
345 atgatgatga aagaatgagc ctcccccttt tttcatttta gaattttcct tttatatttt 9660
347 ttattttgtt tttttccttt atttattatc ctatgtgaaa gcatataatt ggtggctttt 9720
349 ggggaataatt gtgtggcatg tggaaaagtt agtgtggcat gtggaaaaat gagggtgaca 9780
351 tgtggaaaaa tgattagggc gtgtgccttt tgcatgtatg taatgaaaaa tggaaagtga 9840
353 ggtgttgagg tggcatagtg acgtggcaaa gatgcagtga tctaattatt ttcaattttt 9900
355 tttttttttt tggggggggg ggagaaatta tcaattaaat aaaagtatga taaggtgata 9960
357 gaataaaaaa aaaaataaaa ataaaacaaa tgattaaaaa attttcggga aaggacaaaa 10020
359 ttaacatgtc taacatcatg ccccttttgg atgtaacaa catggtgttt tcatacaaa 10080
361 cagtagacaa tgagacagaa ttttgtcttg acctttattc aaaagcacgg agcacgagga 10140
363 aggagggaaa acaggtcttg acttaggaca tctacctac ccaagttatg agggaaattaa 10200
365 gtgacagtta tctcaaagga ttggtaggag atggactatg ccgagttgga gactcgagt 10260
367 aggtcccatc gaggttccga tctgtgctc tgttattaca tcaaaaataa aaattacaag 10320
369 ttaaaaacat aaatgaaatt acaaaatcct atcttcgcag cttctgttgg actcttgact 10380
371 tgagtttcat caccctattc ttcaggcggg cttctgattt gaaatttctt caacttggtg 10440
373 cttgggtttt aatttcatca cctgttctc caggcgggct cctgacttgc tattttcgat 10500
375 ctgttgactt tcattttctt caotttgtta cttgacttcc aacttcttta cttgttgct 10560
377 tgactttcaa tttcttcacc ttaactacta actttccatt tattcgccct gtgcttcggg 10620
379 cgggctcctg aaatcacatt aaaactagaa agaaaattat cccaaacaaa attattgtaa 10680
381 agagaaaatt gtttgccaaa aaagtaaagt tccaaaatag atactgtttt tttttgcccc 10740
383 agtttaccat caaaagactt ttgagaaagt cagatcatac ctacttgaca taatgaatca 10800

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/864,680

DATE: 07/24/2001

TIME: 11:38:05

Input Set : N:\Crif3\RULE60\09864680.txt

Output Set: N:\CRF3\07242001\I864680.raw

```

385 agactctgat caagaaatgc atctcttaac aataaaattg aatgaccaag actaggaagt 10860
387 gcgtctccta agaattaaag tgaggaattc tgactagaaa gtgtgttttc tagagataga 10920
389 agtttaaatt aaaaagtgtg tcacctgaca aatgaaaact aacaaagaag tgcgtctcat 10980
391 aaggattaaag tgcaatgact cgactagaaa gtgcattttc tagaaatcaa ggagaatgac 11040
393 tcaactaaaa ggtacgtctt ataggaatca aaggaaatga ctogactaaa aggtacgtct 11100
395 tctaggggtc aaggggaatg actcgactaa aaggtacgtt ttctaggggt caaggggaat 11160
397 gactcgacta aaaggtatac cttataggaa tcaaaaggag atgaatcaac taaaaagtac 11220
399 gtcttatagg aatcaaggag gatgactcga ctaaaaggta cgtcttatag gaataaaggg 11280
401 ggatgactcg actaaaagg acatcttata ggaatcaaaag aaagatgact cgactaaaag 11340
403 ttacgtctta taggaatcaa agggagatga ctcgactaaa aggtacgtct tataggaatt 11400
405 cagggaatg tctcgactaa aaggtacgtc ttctaggggt caaggggaat gactcgacta 11460
407 aaaggtatgc cttataggaa tcaaggggtc tgactctact aaaatgtacg tcttatagga 11520
409 atcaaggggg atgactcaac taaaagggtat gtcttccaag agtcaaaggg aatgactaga 11580
411 ttagagggtg cgtcttctag gagtgaagggt tcaatttaag aagtgtatca ctgaaaaaat 11640
413 gaaaactaaa atccctgat aggaaagtgt gtctccgagg gatataagat gatgaatttt 11700
415 taccatgatt taattatcaa acatgtgcag caacattgct tcctgcattt gtaaaagcga 11760
417 gaaattaggg gccttgatgt ttaggctttg aaatccttga tttgaagggtg acatgtgttc 11820
419 ctgtttcatg taaagaaaaa ttgtgagttt aaaaacatgg aggcagggtt gtggcttttg 11880
421 ctttcgtggc aaacgctctt gccgtcatca catttaacct tgcttccaac cattacatat 11940
423 atcattgact tgatgcatca ttgaccaaac tcagattatt aagagtgact gagacaaaca 12000
425 catcatctct gctttgtcat gcttctcaga tagaccctt gtaaccttg tatttcatga 12060
427 gttttcagac ttctctattg acaatacttc tacataacct ttttggtcga caattatgtc 12120
429 tctttcatgt gctagctttt gtcttgcttt gtgcaattaa tgaagctagt agctagtttt 12180
431 ggaatctttc ctacttggt ttgacacaca ctgactcaa agacaagaaa agaaaataga 12240
433 atgacaattt ttatttggat aactgactca aagataaaca aaaataaaga gaagaaagaa 12300
435 aagacaatga atgtctacgt ttgaaacaaa gaaatgacaa atttatcgaa aaaacgacag 12360
437 tcaactctaa tgattatgcc atgcattttg gattgagcag cttgatcttt tcatccaaac 12420
439 tttctaccaa ttgttgttga gttaacggcc ttgaaactga gttacttcct taggtcaatt 12480
441 gcatttacga cctcattcgg ctagtggcgc cttgaagggt tttcgccaac aagcctctct 12540
443 catttttctc tcagctcact atcgtcttac ggtgcccgta agggttttca ccaataagac 12600
445 tcacattttt atttctctcc tgacttttta tgttgaggaa aacaagtagt tccccaaatg 12660
447 tgtcatcata ccattgcat gcttagcctt agcattctca gagattgatc tgaaggctct 12720
449 tctttggttg taacttggct tttggataag gttagaaaga aaggatgaca tgaggcccaa 12780
451 acaacacttg aagtggggta agacatatag cttttgaaat cgactcaaac aatgagtatt 12840
453 aactcatgcc ccagtttctt cggactgggt gactctaaat tatttatttg gctggaccga 12900
455 gctccggtaa gacagcctac atattcaccc tcgaaagaga gagtcagggtc atgcgtagtt 12960
457 ccgtcagctt attctttcac ttgattctaa aattttctct tttgttgact ctttctcttt 13020
459 gggaattttc taactttatt tttcttgaca cttttctctt tttttctttt ggggacaaaa 13080
461 tttccttttc tctcttcttt tttttttttg aaacttttct gacactattt ttttcgacac 13140
463 ttttcttttg agctttgatg actctatctt aattccaaag gaggtgtatg aaagaagata 13200
465 aaataaatgg ggtaaataaa ggatgacaca atgtttggat agcagaatga aatgccttca 13260
467 tcatatcaat ccttgagaat gcaagtacat aacatgcaat tggaaaatgg gagataaaga 13320
469 tcatgtgtaa cattttaaca acactaactt aaactgaaca tgtgtgccac ttcttcttct 13380
471 tctatacttg tccaacatac accaccacct ttgttatgca tccctcacat cgaatgattc 13440
473 atgttttcgt ggagctgatt totttttgtt cctcttgata taggatcccg cagccactgg 13500
475 ttgacctaat tgagacatgt ctttcaattg atggccgagt tattcttgtg attcctaaaa 13560
477 tatttgtctt aattttcaga aaaggcttca acttgtcacc aaatgtctca gcactctatc 13620
479 tattttctta gatgtttctt ccgaccttag cctcttaatt tcacgttcat gcttaaaacta 13680
481 gattttaaga tctgactgaa aatttcacta gtatgtcata tcactagagt caacataaaa 13740

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/864,680

DATE: 07/24/2001

TIME: 11:38:06

Input Set : N:\Crf3\RULE60\09864680.txt

Output Set: N:\CRF3\07242001\I864680.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date